National Institute of Environmental Health Sciences

Testicular torsion and weather conditions: Analysis of 21,289 cases in Brazil

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Abstract:

PURPOSE: The hypothesis of association between testicular torsion and hyperactive cremasteric reflex, worsened by cold weather, has not been proved. Thirteen studies in the literature evaluated this issue, with inconclusive results. The aim of the present study was to evaluate the seasonality of testicular torsion in a large subset of patients surgically treated in Brazil, and additionally to estimate the incidence of testicular torsion. MATERIALS and METHODS: Brazilian Public Health System Database was assessed from 1992-2010 to evaluate hospital admissions associated with treatment of testicular torsion. Average monthly temperature between 1992-2010 was calculated for each region. RESULTS: We identified 21,289 hospital admissions for treatment of testicular torsion. There was a higher number of testicular torsions during colder months (p Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 0.002). To estimate the incidence of testicular torsion, we have related our findings to data from the last Brazilian census (2010). In 2010, testicular torsion occurred in 1.4:100,000 men in Brazil. CONCLUSIONS: Testicular torsion occurred at an annual incidence of approximately 1.4:100,000 men in Brazil in 2010. Seasonal variations do occur, with a significant increase of events during winter. Our findings support the theory of etiological role of cold weather to the occurrence of testicular torsion. Strategies to prevent these events can be based on these findings.

Source: http://brazjurol.com.br/march_april_2012/Korkes_222_229.htm

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Temperature

Temperature: Fluctuations

Geographic Feature:

resource focuses on specific type of geography

Urban

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Central/South America

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Other Health Impact

Other Health Impact: testicular torsion

Resource Type: ☑

format or standard characteristic of resource

Research Article

Timescale: ☑

time period studied

Time Scale Unspecified